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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,167	06/06/2001	Takeo Inoue	33240M013	4944
	7590 06/23/2005		EXAMINER	
SMITH, GAMBRELL & RUSSELL, LLP 1850 M STREET, N.W., SUITE 800			OPSASNICK, MICHAEL N	
WASHINGTON, DC 20036			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	09/806,167	INOUE, TAKEO					
Office Action Summary	Examiner	Art Unit					
	Michael N. Opsasnick	2655					
The MAILING DATE of this communication Period for Reply	appears on the cover sheet with	the correspondence address					
A SHORTENED STATUTORY PERIOD FOR RE THE MAILING DATE OF THIS COMMUNICATIO Extensions of time may be available under the provisions of 37 CFF after Six (6) MONTHS from the mailing date of this communication. If the period for repty specified above is less than thirty (30) days, a If NO period for repty is specified above, the maximum statutory Failure to repty within the set or extended period for repty will, by st Any repty received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	N. R 1.136(a). In no event, however, may a reply reply within the statutory minimum of thirty (3 riod will apply and will expire SIX (6) MONTHS atute, cause the application to become ABANI	be timely filed by days will be considered timely. from the mailing date of this communication. DONED (38 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 2	5 March 2005.	•					
' = '-	2a) ☐ This action is FINAL . 2b) ☑ This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practice under	ar Ex parte Quayle, 1935 C.D. 1	1, 453-O.G. 213.					
Disposition of Claims							
4) Claim(s) 1-8 is/are pending in the application	on.						
4a) Of the above claim(s) is/are with	drawn from consideration.						
5)⊠ Claim(s) <u>4-8</u> is/are allowed.	Claim(s) <u>4-8</u> is/are allowed.						
6)⊠ Claim(s) <u>1-3</u> is/are rejected.	•						
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction an	d/or election requirement.						
Application Papers							
9) The specification is objected to by the Exam	niner.						
10)☐ The drawing(s) filed on is/are: a)☐ a	accepted or b) ☐ objected to by	the Examiner.					
Applicant may not request that any objection to	• • • • • • • • • • • • • • • • • • • •	` '					
Replacement drawing sheet(s) including the cor		•					
11) The oath or declaration is objected to by the	Examiner. Note the attached O	office Action or form PTO-152.					
Priority under 35 U.S.C. § 119		•					
12)⊠ Acknowledgment is made of a claim for fore a)⊠ All b)□ Some * c)□ None of:	ign priority under 35 U.S.C. § 11	19(a)-(d) or (f).					
1. Certified copies of the priority documents have been received.							
Certified copies of the priority docum	• •						
Copies of the certified copies of the p	•	ceived in this National Stage					
application from the International Bur	, , , , , , , , , , , , , , , , , , , ,						
* See the attached detailed Office action for a	list of the certified copies not rec	ceivea.					
•							
Attachment(s)	45 🗖 Investiga 🙃	(PTO 442)					
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 	4) Interview Sum Paper No(s)/M						
Information Disclosure Statement(s) (PTO-1449 or PTO/SB, Paper No(s)/Mail Date		mal Patent Application (PTO-152)					

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DETAILED ACTION

Allowable Subject Matter

- 1. Claims 4-8 are allowable over the prior art of record.
- 2. The following is an examiner's statement of reasons for allowance:

As per independent claims 4-8, the claim language pertaining to a different calculation for a short and a long pitch period expectation, in addition to omitting the pitch processing of the subsequent waveforms, is not explicitly taught by the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

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Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by <u>Yeldener et al</u> (5774837).

As per claim 1, Yeldener et al (5774837) teaches:

"in a voice signal pitch period......time period" as voice detecting, and pitch period processing (col. 11 lines 1-14);

"reducing......pitch period" as smoothing the pitch (col. 13 lines 37-46), which averages over errant pitch determinations (col. 13 lines 37-43), which in affect removes, or reduces the number of pitch representations.

As per claim 2, Yeldener et al (5774837) teaches:

"in a voice signal pitch period......time period" as voice detecting, and pitch period processing (col. 11 lines 1-14);

"judging.....predetermined time period" as using the ration of possible peak
amplitudes versus a frequency response of a comb filter (col. 11 line 45 - col. 12 line 20)

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"the number of times......detected pitch period" as considering hk harmonics of the main frequency amplitude (col. 12 lines 18-250 and checking for sub-multiples (col. 12 line 55 – col. 13 line 20).

As per claim 3, Yeldener et al (5774837) teaches:

"first means...predetermined time period" as voice detecting, and pitch period processing (col. 11 lines 1-14);

"second means....reference value; third means......pitch periods detected" as using the ration of possible peak amplitudes versus a frequency response of a comb filter (col. 11 line 45 – col. 12 line 20);

"fourth means.....detected pitch period" as considering hk harmonics of the main frequency amplitude (col. 12 lines 18-250 and checking for sub-multiples (col. 12 line 55 – col. 13 line 20);

"and omitting.....periods detecting" as omitting the rest of the checking steps if the ratio is less than the adjustable threshold (col. 13 lines 1-13).

Response to Arguments

6. Applicant's arguments filed 3/25/2005 have been fully considered but they are not persuasive. As per the arguments on pages 2-3 of the response with respect to Yeldener not teaching a predefined threshold, examiner argues that Yeldener shows predetermined and updated threshold values (col. 11 line 45 – col. 12 line 20).

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Conclusion

7. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231 or faxed to: (703) 872 9314,

(for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Opsasnick, telephone number (571)272-7623, who is available Tuesday-Thursday, 9am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Wayne Young, can be reached at (571)272-7582. The facsimile phone number for this group is (571)272-7629.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (571) 272-2600, the 2600 Customer Service telephone number is (571)272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mno 6/21/05

> Michael N Opsasnick Examiner

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